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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/730,983

12/10/2003

Takahiro Esaki

2003_1797A

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08/01/2006

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EXAMINER

HUFFMAN, JULIAN D

ART UNIT

PAPER NUMBER

2853

DATE MAILED: 08/01/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/730,983

Applicant(s)

ESAKI ET AL.

Examiner

Julian D. Huffman

Art Unit

2853

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 July 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 9, 11-13, 15-20 and 25-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 9, 11, 15, 17, 25 and 27 is/are rejected.
- 7) ☒ Claim(s) 12, 13, 16, 18-20, 26 and 28 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 February 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. The finality of the prior final rejection is withdrawn.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 9, 11, 15, 17, 25 and 27 are rejected under 35 U.S.C. 102(b) as being anticipated by Kubota et al. (U.S. 2002/0051033 A1).

With regards to claim 9, Kubota et al. discloses a recording apparatus (fig. 2) comprising:

line heads (11C, 11M, 14B), and each of said line heads for discharging a colored ink (cyan, magenta, black) onto a recording medium traveling relative to said line heads in a transport direction (A),

wherein a first of said line heads (11C) is offset relative to a second of said line heads (11M) in a Y direction, perpendicular to the transport direction, by an amount that is almost equal to a value resulting from dividing a print width of an individual head of said line heads by a total number of different colors of ink (3) to be discharged from said line heads (the offset amount is almost equal to the width of the head divided by 3),

wherein a third of said line heads (14B) is offset relative to said second of said line heads (11M) in the Y direction, but is not offset relative to said first of said line heads (11C) in the Y direction (fig. 2).

With regards to claim 11, said third of said line heads (14B) is offset relative to said second of said line heads (11M) in the Y direction by the amount that is almost equal to the value resulting from dividing the print width of the individual head of said line heads by the total number of different colors of ink to be discharged from said line heads (both 11C and 14B are offset from 11M in the Y direction by the same amount).

With regards to claim 15, the total number of different colors to be discharged from said line heads is three and the different colors are cyan (11C), magenta (11M) and black (14B).

With regards to claim 17, a recording apparatus (fig. 1), comprising:

line heads (11C, 11M, 14B), each of said line heads for discharging a colored ink (cyan, magenta, black) onto a recording medium traveling relative to said line heads in a transport direction,

wherein a first of said line heads (11C) is offset relative to a second of said line heads (11M) in a Y direction, perpendicular to the transport direction (A) by an amount such that when an image is formed from the colored ink being discharged from said line heads a periodic change in density of the ink forming the image is visually dispersed more so than if said first and second of said line heads were not offset by said amount (fig. 2), and

wherein a third of said line heads (14B) is offset relative to said second of said line heads (11M) in the Y direction, but is not offset relative to said first of said line heads (11C) in the Y direction (fig. 2).

With regards to claim 25, said first (11C) and third (14B) of said line heads are each offset relative to said second (11M) of said line heads in the Y direction by an amount that is almost equal to a value resulting from dividing a print width of an individual head of said line heads by a total number of different colors of ink to be discharged from said line heads (the offset amount is almost equal to the width of the head divided by 3).

With regards to claim 27, each of said line heads is for discharging a colored ink by having one of said line heads being for discharging cyan ink (11C), another of said line heads being for discharging magenta ink (11M), and a third of said line heads (14B) being for discharging black ink.

Allowable Subject Matter

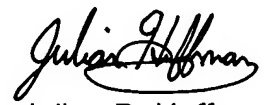
4. Claims 12, 13, 16, 18-20, 26 and 28 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Julian D. Huffman whose telephone number is (571) 272-2147. The examiner can normally be reached on 10:00a.m.-6:30p.m. Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Meier can be reached on (571) 272-2149. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


Julian D. Huffman
Art Unit 2853
24 July 2006